

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

In re the Application

Inventor : **Overes et al.**
Application No. : **10/596,759**
Filed : **June 23, 2006**
For : **Display Apparatus Having Right-Hand and
Left-Hand Illumination Units**

APPEAL BRIEF

On Appeal from Group Art Unit 2885

Date: February 28, 2010

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TABLE OF CONTENTS

	<u>Page</u>
I. REAL PARTY IN INTEREST.....	3
II. RELATED APPEALS AND INTERFERENCES.....	3
III. STATUS OF CLAIMS.....	3
IV. STATUS OF AMENDMENTS.....	3
V. SUMMARY OF THE CLAIMED SUBJECT MATTER...	4
VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.....	5
VII. ARGUMENT.....	6
VIII. CONCLUSION	14
IX. CLAIMS APPENDIX.....	15
X. EVIDENCE APPENDIX.....	17
XI. RELATED PROCEEDINGS APPENDIX.....	17

I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the present application, Koninklijke Philips Electronics N.V., and not the party named in the above caption.

II. RELATED APPEALS AND INTERFERENCES

With regard to identifying by number and filing date all other appeals or interferences known to Appellant which will directly effect or be directly affected by or have a bearing on the Board's decision in this appeal, Appellant is not aware of any such appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-14 have been presented for examination. Claims 1-5 have been cancelled. Claims 6-14 are pending, stand finally rejected, and form the subject matter of the present appeal.

IV. STATUS OF AMENDMENTS

In response to the Final Office Action, dated October 8, 2009, Appellant timely submitted, on December 7, 2009, arguments believed to overcome the reasons for rejecting the claims. While labeled as "Amendment Under 37 CFR § 1.116," this

submission only contained arguments. No amendment has been filed subsequent to the final rejection cited in the Office Action of October 8, 2009.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention is expressed primarily in independent claims 6 and 10. Claim 6 recites a display apparatus (Specification, page 3, lines 20-21; item 1, Figs. 2 and 5) with a display unit (item 11, Figs. 2 and 5), having means for background lighting (described below) at a side or the back of the display apparatus (item 1) to produce a back light pattern (Specification, page 3, lines 23-24; Fig. 1). The means for background lighting comprise two illumination units (item 4, Figs. 2 and 5) being provided at the right-hand and left-hand of the display apparatus (item 1). The illumination units (item 4) being formed as substantially vertically positioned, longitudinal light guides (item 6, Figs. 3A-3C) comprising means for coupling out light (Specification, page 3, line 27 – page 4, line 11), each of the light guides (item 6) being provided on at least one of its ends with a light source (item 9, Fig. 5 and Figs. 3A-3C). The light guides (item 6) as part of the illumination units (item 4) are rotatable along a longitudinal axis to thereby allow adjustment of the back light pattern (Specification, page 4, lines 29-34; Fig. 2).

Claim 10 recites a display apparatus (Specification, page 3, lines 20-21; item 1, Figs. 2 and 5) with a display unit (item 11, Figs. 2 and 5), having means for background lighting (described below) at a side or the back of the display apparatus (item 1). The means for background lighting comprise two illumination units (item 4, Figs. 2 and 5)

being provided at the right-hand and left-hand of the display apparatus (item 1). The illumination units (item 4) being formed as substantially vertically positioned, longitudinal light guides (item 6, Figs. 3A-3C) comprising means for coupling out light (Specification, page 3, line 27 – page 4, line 11), each of the light guides (item 6) being provided on at least one of its ends with a light source (item 9, Fig. 5 and Figs. 3A-3C). Claim 10 further recites that the means for background lighting produces a back light pattern on a wall (Specification, page 3, lines 20-23 and page 4, line 29 – page 5, line 3; Fig. 1 and item 3, Fig. 2).

The remaining claims, which depend from respective independent claims, express further aspects of the invention.

VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1-3, 6, 7 and 10-12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Egawa, U.S. Pub. No. 2002/0041500 (hereinafter, “Egawa”).
2. Claims 4-5, 8, 9, 13 and 14 stand rejected under 35 U.S.C §103(a) as being unpatentable over Egawa in view of Hoelen et al., U.S. Pub. No. 2001/0035853 (hereinafter, “Hoelen”).

VII. ARGUMENT

I. 35 USC §102 Rejection of Claims 1-3, 6, 7 and 10-12

Claims 1-3, 6, 7 and 10-12 are not anticipated by Egawa, as Egawa fails to show material elements recited in the independent claims.

Appellants respectfully submit that the pending claims are patentable for at least the following reasons.

The present invention relates to a background lighting means for a display apparatus. Such background lighting is distinguishable from the conventional LCD-backlighting of Egawa. In particular, claim 6 recites a “means for background lighting” that produces a back light pattern that is adjustable by rotation of the device’s light guides. As illustrated in Fig. 2 and described in the specification at page 4, lines 29-34, rotation of one or more of the illumination units (4) manually adjusts the light spots (5) displayed on a wall (3).

The utility of the invention’s adjustable light pattern is discussed at page 2, lines 14-21.

An interesting display apparatus according to the present invention is characterized in that that the light guides are rotatable along a longitudinal axis. This feature allows adjustment of the back lighting pattern on wall. This is particularly useful in case that the screen of the display apparatus is positioned not parallel to the back

wall, but under a certain angle. In such situation, the user can rotate the light guides in such way that under operation of the back lighting a spot on the wall is obtained which is well balanced on both sides of the display apparatus. By means of this feature, the desired impact on the viewer is maintained, even when the display apparatus is positioned under an angle with respect to the back wall.

Egawa teaches a spread illuminating apparatus used as an illuminating means for a liquid crystal display device (Abstract). Such a device is incapable of having elements that provide the functional capability of the elements recited in claim 6. In particular, Egawa does not teach or imply the rotatability of his light guides to allow adjustment of the back light pattern.

The Final Office Action (dated October 8, 2009; and hereinafter, designated as “the Final Office Action”) asserts that the light guides of the current invention are taught by Egawa’s illumination units 7 (page 3, line 6 of the Office Action) and that these illumination units can be rotated.

In response, Appellants argued that Egawa teaches away from the feature of rotating light guides along a longitudinal axis. Egawa teaches that the output of his illumination units 7 enters a transparent substrate 2 (see for example, line 6 of paragraph [0013]). As illustrated in Figs. 2 and 4 of Egawa and described in corresponding paragraphs [0041]-[0049], illumination units 7 create an overlapping pattern to thereby result in his apparatus providing a more uniformly radiated light. Appellants further argued that any rotation of Egawa’s illumination units 7 is inconsistent with the angles

and overlapping regions depicted in Fig. 2. That is, rotation of Egawa's light source would interfere with the overlapping regions and uniform light radiation required by his invention.

The Final Office Action asserts both in its rejection of claim 6 (at page 3) and in its response to the argument above (at page 6), that "by switching light guides there will be some resulting adjustment in the back light pattern." Appellant misunderstood this argument in that he thought the "adjustment" that the Examiner was asserting was merely the switching (i.e., "on" and "off") of the light guides. Consequently in response, he argued that "even if true and such a switching result arguably yields what could remotely be called an "adjustment," applicants submit that "switching light guides" is patentable distinct from the claimed feature of rotating light guides along a longitudinal axis."

In the Advisory Action the Examiner responded to the above "teaches away" argument by stating that "as light guides 7 are identical, rotation of them 180 degrees in the same direction would not interfere with uniform light radiation whatsoever." Appellants now understand the Examiner's argument: that the "rotation" to which he referred was the replacement of one light guide for another. As the Examiner asserts that each light guide is identical, it is unclear how such a swapping yields any type of change, let alone an "adjustment" as recited in claim 6. Moreover, nothing in Egawa teaches or implies any reason for "rotating" light guides in this manner. Still further, Egawa in each of his figures and at para. [0008], teaches that a light reflection member almost totally encompasses his light guide:

In order for light to be uniformly emitted from the light conductive member 7, the triangular grooves are desirably formed such that the depth increases gradually in proportion to the increase in distance from the spot-like light source 9. And, for effectively using light traveling in the light conductive member 7, it is preferable to provide a light reflection member 12 substantially U-shaped in section so as to cover longitudinal peripheral surfaces except the surface 13 facing the end surface 3 of the transparent substrate 2 and the vicinity of the end surface 3 of the transparent substrate 2 thereby preventing light from leaking from the light conductive member 7. [0008]

Consequently, any swapping of Egawa's light guides would entail removal and replacement of these light reflection members. The Examiner is thus arguing that Egawa's device could be disassembled, identical light guides swapped, and then reassembled to thereby effect some type of "adjustment;" and that consequently Egawa teaches the features of the present invention wherein light guides are rotatable to allow adjustment of the back light pattern. Not only is such an interpretation of Egawa more than a little strained, it is totally unreasonable in light of the field of his invention ("an illuminating means for a liquid crystal display device") in which there does not appear to be any legitimate purpose in rotating light guides, much less swapping them, to effect a back light pattern adjustment.

A claim is anticipated only if each and every element recited therein is expressly or inherently described in a single prior art reference. Egawa cannot be said to anticipate the present invention, because Egawa fails to disclose each and every element recited. As shown, Egawa fails to disclose the feature of "the light guides are rotatable along a

longitudinal axis to thereby allow adjustment of the back light pattern" as is recited in claim 6.

Having shown that Egawa fails to disclose each and every element claimed, Appellants submit that the reason for the Examiner's rejection of claim 6 has been overcome and can no longer be sustained. Appellants respectfully request reconsideration, withdrawal of the rejection and allowance of claim 6.

With respect to claim 10, this claim recites the feature: the means for background lighting produces a back light pattern on a wall. In introducing this claim in their July 27, 2009 amendment (at page 8, 2nd full paragraph), Appellants noted that "[s]upport for this feature is found, *inter alia*, in the specification at paragraph [0007]. Egawa fails to teach or suggest this feature of claim 10. The referenced paragraph (page 2, lines 13-21 of the filed application) states:

An interesting display apparatus according to the present invention is characterized in that that the light guides are rotatable along a longitudinal axis. This feature allows adjustment of the back lighting pattern on wall. This is particularly useful in case that the screen of the display apparatus is positioned not parallel to the back wall, but under a certain angle. In such situation, the user can rotate the light guides in such way that under operation of the back lighting a spot on the wall is obtained which is well balanced on both sides of the display apparatus. By means of this feature, the desired impact on the viewer is maintained, even when the display apparatus is positioned under an angle with respect to the back wall [emphasis added].

The emphasized portion noted above clearly states that the wall and the display apparatus are separate entities. Further, the specification at page 3 lines 20-23 discusses how the display apparatus is mounted to a wall (3) of a room and the background light is formed onto the wall.

In the Final Office Action the Examiner argues “that the term ‘wall’ is vague, and that a wall is defined as the outermost film or layer of a structural material protecting, surrounding, and defining the physical limits of an object (i.e., think blood cell wall). Accordingly, a liquid crystal display member can constitute a ‘wall.’”

Section 2211.01 of the Manual of Patent Examining Procedure (hereinafter, “MPEP”) addresses the issue of “plain meaning” of claim terms:

2111.01 Plain Meaning [R-5]

I. THE WORDS OF A CLAIM MUST BE GIVEN THEIR "PLAIN MEANING" UNLESS **>SUCH MEANING IS INCONSISTENT WITH< THE SPECIFICATION

>Although< claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as **broadly as their terms reasonably allow. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004) (The USPTO uses a different standard for construing claims than that used by district courts; during examination the USPTO must give claims their broadest **reasonable interpretation >in light of the specification<**). This means that the words of the claim must be given their plain meaning unless **>the plain meaning is inconsistent with< the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (discussed below); *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004) (**Ordinary, simple English words whose meaning is clear and unquestionable, absent any indication that their**

use in a particular context changes their meaning, are construed to mean exactly what they say. Thus, "heating the resulting batter-coated dough to a temperature in the range of about 400°F to 850°F" required heating the dough, rather than the air inside an oven, to the specified temperature.). **

And

III. <"PLAIN MEANING" REFERS TO THE ORDINARY AND CUSTOMARY MEAN-ING GIVEN TO THE TERM BY THOSE OF ORDINARY SKILL IN THE ART

"[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, *>415 F.3d 1303, 1313<, 75 USPQ2d 1321>, 1326< (Fed. Cir. 2005) (*en banc*). *Sunrace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003); *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136 (Fed. Cir. 2003) ("In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art."). **It is the use of the words in the context of the written description and customarily by those skilled in the relevant art that accurately reflects both the "ordinary" and the "customary" meaning of the terms in the claims.** *Ferguson Beauregard/Logic Controls v. Mega Systems*, 350 F.3d 1327, 1338, 69 USPQ2d 1001, 1009 (Fed. Cir. 2003) (Dictionary definitions were used to determine the ordinary and customary meaning of the words "normal" and "predetermine" to those skilled in the art. **In construing claim terms, the general meanings gleaned from reference sources, such as dictionaries, must always be compared against the use of the terms in context, and the intrinsic record must always be consulted to identify which of the different possible dictionary meanings is most consistent with the use of the words by the inventor.**);

It is clear from the above emphasized quotations from the MPEP that the Examiner's argument that the claim is not novel over Egawa because a liquid crystal display member can constitute the claim term "wall" cannot be sustained. That is, the examiner's interpretation of the meaning of the term "wall" is not reasonable. Assuming,

arguendo, that a dictionary meaning permits such an interpretation, a person of ordinary skill in the art would not so interpret it. Further, when compared against the terms in context and the intrinsic record, the use most consistent with the words of the inventor is a room wall. A surface of a liquid crystal display is clearly not within a reasonable definition of the term “wall” as discussed in the above quoted sections of the MPEP addressing how the terms of a claim should be given their ordinary meaning.

A claim is anticipated only if each and every element recited therein is expressly or inherently described in a single prior art reference. Egawa cannot be said to anticipate the present invention, because Egawa fails to disclose each and every element recited. As shown, Egawa fails to disclose that the means for background lighting produces a back light pattern on a wall.

Having shown that Egawa fails to disclose each and every element claimed, Appellants submit that the reason for the Examiner's rejection of claim 10 has been overcome and can no longer be sustained. Appellants respectfully request reconsideration, withdrawal of the rejection and allowance of claim 10.

II. 35 USC §103 Rejection of Claims 4-5, 8, 9, 13 and 14

With regard to the remaining dependent claims 4-5, 8, 9, 13 and 14, these claims ultimately depend from independent claims 6 and 10. Appellant respectfully submits that these remaining dependent claims are allowable at least for their dependence upon allowable base claims, without even contemplating the merits of the dependent claims for reasons analogous to those held in *In re Fine*, 837 F.2d 1071, 5 USPQ 2d 1596 (Fed. Cir. 1988) (if an independent claim is non-obvious under 35 U.S.C. §103(a), then any claim depending therefrom is non-obvious).

VIII. CONCLUSION

In view of the above analysis, it is respectfully submitted that the referenced teaching fails to render unpatentable or anticipate the subject matter of any of the present claims. Therefore, reversal of all outstanding grounds of rejection is respectfully solicited.

Respectfully submitted,
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VIII. CLAIMS APPENDIX

The claims which are the subject of this Appeal are as follows:

Claims 1-5 cancelled.

6. A display apparatus with a display unit, having means for background lighting at a side or the back of the display apparatus to produce a back light pattern;
characterized in that the means for background lighting comprise two illumination units being provided at the right-hand and left-hand of the display apparatus, said illumination units being formed as substantially vertically positioned, longitudinal light guides comprising means for coupling out light, each of the light guides being provided on at least one of its ends with a light source;
further characterized in that the light guides are rotatable along a longitudinal axis to thereby allow adjustment of the back light pattern.
7. A display apparatus according to claim 6, characterized in that the means for coupling out light are formed as a structure provided on the surface of the light guide.
8. A display apparatus according to claim 6, characterized in that the display apparatus comprises means for controlling the colour of the backlight and that the light guides are provided on both ends with a light source, said light source comprising a red, a green and a blue LED.
9. A display apparatus according to claim 8, characterized in that the display apparatus comprises a control circuit for controlling the colour of each of the light sources in dependence of a colour of a part of the display screen which is close to the light source.

10. A display apparatus with a display unit, having means for background lighting at a side or the back of the display apparatus;
characterized in that the means for background lighting comprise two illumination units being provided at the right-hand and left-hand of the display apparatus, said illumination units being formed as substantially vertically positioned, longitudinal light guides comprising means for coupling out light, each of the light guides being provided on at least one of its ends with a light source

further characterized in that the means for background lighting produces a back light pattern on a wall.

11. A display apparatus according to claim 10, characterized in that the means for coupling out light are formed as a structure provided on the surface of the light guide.

12. A display apparatus according to claim 10, characterized in that the light guides are rotatable along a longitudinal axis.

13. A display apparatus according to claim 10, characterized in that the display apparatus comprises means for controlling the colour of the backlight and that the light guides are provided on both ends with a light source, said light source comprising a red, a green and a blue LED.

14. A display apparatus according to claim 13, characterized in that the display apparatus comprises a control circuit for controlling the colour of each of the light sources in dependence of a colour of a part of the display screen which is close to the light source.

X. EVIDENCE APPENDIX

No further evidence is provided.

XI. RELATED PROCEEDING APPENDIX

No related proceedings are pending and, hence, no information regarding same is available.